The Frontline Reports column features short descriptions of novel approaches to mental health problems or creative applications of established concepts in different settings. Material submitted for the column should be 350 to 750 words long, with a maximum of three authors (one is preferred) and no references, tables, or figures. Send material to Francine Cournos, M.D., at the **New York State Psychiatric Insti**tute (fc15@columbia.edu) or to Stephen M. Goldfinger, M.D., at **SUNY Downstate Medical Center** (smgoldfingermd@aol.com).

## An Online Portal on Outcomes for Dutch Service Users

Routine outcome monitoring (ROM) in mental health care has become mandatory throughout the Netherlands, much like other countries, such as Australia. The main aim of ROM is to evaluate and improve treatment processes. However, treatment improvement is slowed by a serious gap in ROM, namely a lack of shared decision making, especially for service users with a severe mental illness, including psychotic disorders. Treatment of this population of service users is often in a one-way direction, with clinicians deciding which treatment is best for their clients. This report describes an innovative initiative in the Netherlands to support shared decision making in ROM for service users with psychotic disorders. This initiative is part of a broader e-mental health project, called WEGWEIS, which focuses on the development and evaluation of online tools to support self-management for people with psychotic disorders (development.wegweis.nl).

For a few years now, the mental health care organizations and the University Medical Center in the northern part of the Netherlands have joined forces in the ROM evaluation of service users with psychotic disorders. By means of a centralized Web-based

ROM system, an evaluation is conducted for each service user at least annually. It consists of a physical examination (measuring weight, girth, height, and glucose levels) and multiple interviews and questionnaires, including the Health of the Nation Outcome Scale, Manchester Short Assessment of Quality of Life, Camberwell Assessment of Need, the Positive and Negative Syndrome Scale (PANSS), and a client satisfaction scale. Test parameters are uploaded by clinicians and research nurses into a central database through a link in the electronic patient file. An intelligent database management program presents the ROM results, summarizing all test outcomes in a letter addressed to both mental health clinicians and general practitioners. This letter, which can be accessed only via the secure environment of the electronic patient file, encourages clinicians to evaluate the treatment process together with their clients and, if necessary, to revise the treatment plan. The connection between the database server and the electronic patient file is secured by means of data encryption.

To increase the involvement of service users in their ROM evaluation, we developed a ROM portal for service users as part of a 2009 collaborative project. We held periodic meetings with a focus group of service users to investigate their needs and preferences; together, we sketched a design of a prototype portal, which was executed by computer scientists.

The ROM portal has the form of a Web site, which can be accessed by entering a user name and password. After logging in, service users can access their ROM results, including their scores on several questionnaires and interviews and data from their physical examination. These results are accompanied by a short explanation of the parameters. For instance, a service user with high scores on the PANSS is told, "The results suggest that you are bothered by psychotic symptoms, meaning. . . . " Or someone with several low-scored items on the client satisfaction scale is told, "The results suggest that you are not completely satisfied with the care you receive."

Service users can access personalized advice linked to their results. For instance, when the results indicate that a service user is not satisfied with the care and treatment received, the system generates the question, "Are you not satisfied with the care you receive?" By clicking on this question, service users are advised to make appointments with their psychiatrists or case managers, and they receive information about the local client board and the help desk of patient counselors. Furthermore, the question "What care are you entitled to receive?" links to information derived from the Dutch multidisciplinary guideline, which describes service users' rights to good care. Finally, clicking on "What services does your health care organization offer?" gives an overview and description of the health care services offered by that service user's health care organization. The advice is made as concrete as possible by inserting personalized information into the text. For a service user in care at the University Medical Center, for example, the question about health care services reads "What services does the University Medical Center offer?" instead of the more general phrase "your health care organization."

We tested the ROM portal with our focus group, and the service users were enthusiastic. We are now working together to increase their involvement by adding forums for service users to describe their experiences with specific treatment interventions and by soliciting users' comments about their mental health services and the advice generated by the ROM portal.

Lian van der Krieke, M.Sc. Ando C. Emerencia, M.Sc. Sjoerd Sytema, Ph.D.

Ms. van der Krieke and Dr. Sytema are with the University Center for Psychiatry, University Medical Center Groningen, P.O. Box 30001, 9700 RB Groningen, The Netherlands (e-mail: lian@wegweis.nl). Mr. Emerencia is with the Department of Computing Science, University of Groningen.